

PRODUCT INFORMATION



1,2,3-Trioctanoyl Glycerol

Item No. 26952

CAS Registry No.: 538-23-8

Formal Name: octanoic acid,

Synonyms: 1,1',1''-(1,2,3-propanetriyl) ester
Glyceryl Trioctanoate, NSC 4059,
TG(8:0/8:0/8:0), Tricaprylin,
Trioctanoin, Trioctanoyl Glycerol

MF: $C_{27}H_{50}O_6$

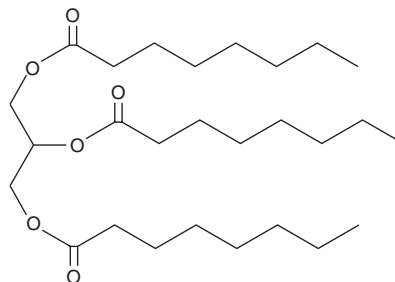
FW: 470.7

Purity: $\geq 95\%$

Supplied as: A neat oil

Storage: -20°C

Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

1,2,3-Trioctanoyl glycerol is supplied as a neat oil. A stock solution may be made by dissolving the 1,2,3-trioctanoyl glycerol in the solvent of choice, which should be purged with an inert gas. 1,2,3-Trioctanoyl glycerol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 1,2,3-trioctanoyl glycerol in these solvents is approximately 30 mg/ml.

Description

1,2,3-Trioctanoyl glycerol is a triacylglycerol that contains octanoic acid at the *sn*-1, *sn*-2, and *sn*-3 positions. Dietary administration of 1,2,3-trioctanoyl glycerol (260 g/kg diet) increases hepatic and adipose tissue glucose-6-phosphate dehydrogenase (G6PDH), citrate cleavage enzyme (CCE), and malic enzyme activities in rats.¹ It induces nuclear edema and cytolysis in tumor cells, but not normal hepatic cells, in a murine hepatic carcinoma model.²

References

1. Torii, S., Hwang, S.G., Matsui, T., *et al.* Comparative changes of lipogenic-related enzyme activities by dietary glycerol tricaprlylate, tricaprplate, trilaurate and trioleate in rat liver and adipose tissues. *Anim. Sci. Tech.* **67**(5), 430-438 (1996).
2. Burton, A.F. Oncolytic effects of fatty acids in mice and rats. *Am. J. Clin. Nutr.* **53**(4 Suppl), 1082S-1086S (1991).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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